

Claims

1. A method of diagnosing intolerance by a subject to a specified substance, comprising the steps of:

5 incubating a leucocyte sample prepared from whole blood drawn from the subject with an extract of said substance; and

10 detecting whether or not polymorphonuclear neutrophils (PMNs) in the sample have become activated by determining whether or not PMNs in the sample have become adhesive.

2. The method of Claim 1, wherein the step of detecting comprises the step of determining the PMN adhesion by assaying adhesion to a plastic surface.

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3. The method of Claim 2, wherein the step of determining comprises the step of determining the PMN adhesion by assaying adhesion to a plastic multi-well titre plate.

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4. The method of Claim 3, wherein the step of determining comprises the step of determining the PMN adhesion by assaying adhesion to the titre plate containing 96 wells.

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5. The method of Claim 4, further comprising the step of washing the plastic surface to remove unreacted cells, after incubation of the sample with the food extract but before assaying adhesion.

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6. The method of Claim 5, wherein the step of detecting adhesion comprises the steps of detecting by lysis and assaying for one or more intracellular markers for PMNs.

7. The method of Claim 6, further comprising the step of selecting one or more markers from acid hydrolases, myeloperoxidases, lysozyme, lactoferrin, neutral proteases and serine proteases and lactic dehydrogenase.

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8. The method of Claim 1, wherein the step of detecting comprises the step of optically detecting PMN activation.

9. The method of Claim 1, wherein the step of detecting comprises the step of detecting the PMN activation by luminescence, detecting the uptake of dyes or fluorescent markers, photometry, detecting release of cytokines or by detecting release of bioactive molecules, microbial proteins and/or free radicals.

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